

PATENT CLAIMS

1. Said voltage converter (SCW) for converting a said primary/secondary voltage
5 (U_P/U_S) into a said secondary/primary voltage (U_S/U_P), comprising at least one
said controlled switch (S_P, S_S), wherein a said control circuit (AST) controls,
according to its supplied set points, the at least one said controlled switch (S_P, S_S)
with a variable pulse duty factor and/or variable control times and/or variable
frequency,
- 10 **characterized in that**
- a said digital signal processor (DSP) for the running calculation of the set points is
provided for the said control circuit (AST), and
- the said voltage converter (SCW) comprises a said (bus) interface (BSS), via
15 which said operating parameters (ppm) can be transmitted to the said digital
signal processor (DSP) and can be preset from a said external control center
(ELS).
2. Said voltage converter (SCW) in accordance with claim 1, **characterized in that**
20 the said (bus) interface (BSS) is bidirectional and said operating data (V_P, U_S, I_S)
of the converter can be transmitted via the said bus interface at the said external
control center (ELS).
3. Voltage converter in accordance with claim 2, **characterized in that** a said
memory (SPE) is provided for the storage of operating data, which can be read
25 out via the said (bus) interface (BSS).
4. Voltage converter in accordance with claim 2 or 3, **characterized in that** a said
real time clock (RTC) is provided in order to correlate operating data with time
values.

5. Voltage converter in accordance with one of the claims 2 through 4, **characterized in that** a said auxiliary energy memory (HES) is provided for the permanent energy supply of the said digital signal processor (DSP) and/or of the said real time clock (RTC).
- 5 6. Voltage converter in accordance with claim 5, **characterized in that** the said auxiliary energy memory (HES) is reloaded in the presence of primary voltage (Up) and/or secondary voltage (Us).